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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/587,357 | 07/26/2006 | Sinan Balci | 016906-0534 | 6644 |
| 23428 7590 02/25/2008 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007 | | | EXAMINER WALBERG, TERESA J | |
| | | | ART UNIT 3744 | PAPER NUMBER |
| | | | MAIL DATE 02/25/2008 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/587,357

Applicant(s)

BALCI ET AL.

Examiner

Teresa J. Walberg

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/88)
Paper No(s)/Mail Date 7/26/06 4/30/7
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 2, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Richardson (5,954,123).

Richardson discloses a metal side plate for radiators (Fig. 3) having tubes and heat exchanger surfaces extending between the tubes (Fig. 3), the radiator being enclosed by at least one metal side plate (4) arranged laterally on the radiator or at least one pair of metal side plates (4) arranged on either side of the radiator, at least one metal side plate exhibiting at least one weakened area (12) in which the material of the metal side plate is weakened in such a way as to

allow compensation for the thermal expansion corresponding to that of the radiator body, the weakening of a weakened area is effected by perforation in the material of the metal side plate (Fig. 5), the insert plate being bent (5), at least in the area of weakening (Fig. 3), and is of a u-shaped execution (Fig. 3), the metal plate being used in a heat exchanger (Fig. 3).

3. Claims 1-3, 7, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Kodumudi (6,736,193).

Kodumudi discloses a metal side plate for radiators (Fig. 2) having tubes and heat exchanger surfaces extending between the tubes (Fig. 2), the radiator being enclosed by at least one metal side plate (2) arranged laterally on the radiator or at least one pair of metal side plates (2) arranged on either side of the radiator, at least one metal side plate exhibiting at least one weakened area (1) in which the material of the metal side plate is weakened in such a way as to allow compensation for the thermal expansion corresponding to that of the radiator body, the weakening of a weakened area is effected by perforations (52) in the material of the metal side plate (Fig. 10), the penetrations (52) being embodied in such a way that a network of webs is formed (Fig. 10) the insert plate being bent (23 in Fig. 10), at least in the area of weakening (Fig. 10), and is of a u-shaped execution (Fig. 10), the metal plate being used in a heat exchanger (Fig. 2).

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodumudi (6,736,193).

Kodumudi discloses the metal side plate as claimed with the exception of the shape and proportions of the perforations. However, it would have been obvious to one of ordinary skill in the art to give the perforations any desired shape and proportions as determined by the size and expected temperature ranges to be used in the heat exchanger.

6. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodumudi (6,736,193) in view of Bosch (GB 1,592,125).

Kodumudi discloses the metal side plate as claimed with the exception of the weakening of a weakened area being effected by perforations and the shape and proportions of the perforations. However, Bosch shows using a plurality of perforation in an expansion area (35, 36 in Fig. 4). It would have been obvious in view of Bosch to use a plurality of perforations in a weakened area, the motivation being to make the area more readily deformable. With respect to claims 4-6, it would have been obvious to one of ordinary skill in the art to give

the perforations any desired shape and proportions as determined by the size and expected temperature ranges to be used in the heat exchanger.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakamura et al, Siler, and Nguyen are cited to show expansion perforations in heat exchangers.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa J. Walberg whose telephone number is 571-272-4790. The examiner can normally be reached on M-F 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Teresa J. Walberg/
Primary Examiner, Art Unit 3744

/TW/